PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

MATSUO, Norifusa, et al.

Appln. No.: 09/403,368

Confirmation No.: Unknown — Group Art Unit: 1616 (parent)

Filed: Herewith — Examiner: N. LEVY (parent)

For: COMPOSITION FOR CONTROLLING HARMFUL BIO-ORGANISMS AND METHOD FOR CONTROLLING HARMFUL BIO-ORGANISMS USING THE SAME

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

Prior to examination, please amend the above-identified application as follows:

IN THE SPECIFICATION:

The specification is changed as follows:

Page 1, immediately beneath the Title insert:

--This application is a divisional application of USSN 09/403,368 filed October 21, 1999 as the national stage application under 37 C.F.R. § 371 of PCT/JP98/01889 filed April 23, 1998.--

Page 9, lines 12-13, change as follows:

pentachloronitrobenzene (common name: Quintozene));

Page 10, lines 17-18 change as follows:

S-benzyl O,O-di-isopropyl phosphorothioate (common name: Iprobenfos), lines 19-20, change as follows:

O-ethyl S,S-diphenyl phosphorodithioate (common name: Edifenphos),

Page 11, lines 21-25 to page 12, lines 1-15 , delete and insert:

The inorganic copper fungicides include those containing copper oxysulfate as an active ingredient such as Sanpun Bordeaux (trade name, produced by Daiichi Noyaku K.K. and Hokko Chemical Industry Co., Ltd.) and Sanpun Bordeaux Dust DL (trade name, produced by Daiichi Noyaku K.K. and Hokko Chemical Industry Co., Ltd.); those containing copper (I) oxychloride as an active ingredient, such as San Bordeaux (trade name, produced by Sankei Chemical Co., Ltd.), Doitsu Borudo A (trade name, produced by Dai-ichi Noyaku K.KI. and Hokko Chemical Industry Co., Ltd.), Do-cal Wettable Powder (trade name, produced by Yashima Chemical Industry Co., Ltd.), Do-jet (trade name, produced by Nissan Chemical Industries, Ltd.), etc.; those containing cupric hydroxide as an active ingredienL, such as Kocide Bordeaux, Kocide DF, Kocide SD (trade names, all produced by Griffin), etc.; and those containing anhydrous copper (II) sulfate, such as Gandie Wettable Powder (trade name, produced by Agro-Kanesho Co., Ltd.), etc.

Page 12, lines 16-25 to page 13, lines 1-24 delete and insert the following:

The fungicidal preparations containing the inorganic copper fungicide and chemicals (such as fungicides, etc.) other than ingredients (a) and (b) include a Bordeaux mixture

containing basic copper calcium sulfate; copper-sulfur fungicides, such as Engei Bordeaux (trade name, produced by Sankei Chemical Co., Ltd.), etc.; copper-validamycin fungicides; copper-validamycin-fthalide fungicides; copper-pyrifencox fungicides; copper (I)-vinclozolin fungicides; copper-fthalide fungicides; copper-procymidone fungicides, such as Scletane Wettable Powder (trade name, produced by Hokko Chemical Industry Co., Ltd.); copper (I) - fosetyl wettable powders; copper-metalaxyl fungicides, such as Ridomil Copper Wettable Powder (trade name, produced by Nihon Nohyaku Co., Ltd.); iprodione copper (I) fungicides, such as Daisedo Wettable Powder (trade name, produced by Yashima Chemical Industry Co., Ltd.); iminoctadine triacetate-copper fungicides; oxadixyl copper (I) fungicides; oxolinic acid-copper fungicides; kasugamycin-copper fungicides, such as Kasumin Bordeaux Dust 3DL (trade name, produced by Hokko Chemical Industry Co., Ltd.), Kasumin Bordeaux (trade name, produced by Dai-ichi Noyaku K.K. and Hokko Chemical Industry Co., Ltd.), etc.; dithianon copper (I) fungicides; streptomycin-copper fungicides, such as Do Stomy Wettable Powder (trade name, produced by Nihon Nohyaku Co., Ltd.), etc.; sodium hydrogencarbonate-copper fungicides, such as G-Fine Wettable Powder (trade name, produced by Yashima Chemical Industry Co., Ltd.); and copper-organocopper fungicides , such as Oxy Bordeaux (trade name, produced by Sankyo Co., Ltd.), Kinset Wettable Powder (trade name, produced by Agro-Kanesho Co., Ltd.), Kinset Wettable Powder 80 (trade name:, produced by Agro-Kanesho Co., Ltd.), etc.

Page 14, lines 7-25 through page 15, lines 1-4 delete and insert the following:

The organic copper fungicides include 8-hydroxyquinoline copper fungicides, such as Quinone-do Wettable Powder 40 or 80 (trade name, produced by Agro-Kanesho Co., Ltd.), Quinone-do Granules (trade name, produced by Agro-Kanesho Co., Ltd.), Quinone-do Flowable

(trade name, produced by Agro-Kanesho Co. , Ltd.), Oxine- copper (I) Wettable Powder (trade name, produced by Tomono Agrica Co., Ltd.), Oxine-copper (I) Wettable Powder 75 (trade name, produced by Tomono Agrica Co., Ltd.), Oxine-copper (I) Wettable Powder 80 (trade name, produced by Tomono Agrica Co., Ltd. and Nissan Chemical Industries, Ltd.), Oxine-copper (I) Flowable (trade name, produced by Tomono Agrica Co., Ltd. and Nissan Chemical Industries, Ltd.), Dokirin Wettable Powder 80 (trade name, produced by Nihon Nohyaku Co., Ltd.), and Dokirin Flowable (trade name, produced by Nihon Nohyaku Co., Ltd.), etc.; copper hydroxynonylbenzenesulfonate fungicides such as Yonepon (trade name, produced by Yonezawa Kagaku K.K.), etc.; copper (II) bis (ethylenediamine) bis (dodecylbenzenesulfonate) fungicides, such as Sanyol (trade name, produced by Otsuka Chemical Co., Ltd. and Yonezawa Kagaku K.K.), etc.; and copper terephthalate fungicides.

Page 16, lines 17-25 through page 18, lines 1-4 delete and insert the following:

Suitable nonionic surface active agents which can be used as activity-enhancing ingredient (c) include polyoxyethylene alkyl ethers, polyoxyethylene alkylphenyl ethers, polyoxyethylene aryl ethers, polyoxyethylene glycol alkyl ethers, polyoxyethylene fatty acid esters, polyoxyethylene polyol fatty acid esters, polyoxyethylene fatty acid amides, amine N-oxides such as Aromox C/12W (trade name, produced by Akzo Chemie), polyoxyethylene alkylamines, glycerol fatty acid esters, silicone surface active agents, polyoxyethylene alkyl thioether polyphosphate surface active agents such as Reider (trade name, produced by American Trading Company), higher alcohol sulfuric acid esters, and dialkylsulfosuccinates. Among these, preferred are polyoxyethylene alkyl ethers, polyoxyethylene alkylpheny ethers, polyoxyethylene fatty acid esters, polyoxyethylene fatty acid amides, silicone surface active agents, higher alcohol sulfuric acid esters, and dialkylsulfosuccinates. Still preferred are silicone surface active agents,

polyoxyethylene alkylphenyl ethers and polyoxyethylene fatty acid esters. Silicone surface active agents, especially DyneAmic (trade mark, produced by Setre Chemical) and KINETIC (trade mark, produced by Setre Chemical), and SILWETT L-77 (produced by Witco) , and SLIPPA (produced by Interagro) are particularly preferred.

Specific examples of preferred nonionic surface active agents are listed in Table 1 below. Additionally polyoxyethylene polysilane ether (a kind of silicone surface active agents), Renex 36 (trade name, polyoxyethylene alkyl ether produced by Bayer AG), Crop Oil Extra (trade name of a polyoxyethylene alkylphenyl ether produced by Kalo, Inc.), Ortho X-77 Spreader (trade name, produced by Chevron Chemical Company), and COOP Spreader Activator (trade name, produced by Formland Industry) are also include in useable nonionic surface active agents.

Page 21, see the attached chart.

Page 23, line 2 delete in its entirty and insert the following:

Anionic Surface Active Agents

Page 25, the paragraph after Table 4 delete and insert the following:

The paraffin oil which can be used as activity enhancing ingredient (c) includes product originated from animal and/or vegetable oil, product originated from mineral oil (e.g., petroleum), and mixtures thereof. Specific examples are shown in Table 5 below.

Page 27, the paragraph after Table 6 delete in its entirety to page 28, lines 1-12 and insert the following:

The above-described spreaders, i.e., surface active agents (except sorbitan higher fatty acid esters), animal and/or vegetable oil, paraffin oil, mineral oil, etc. can be combined appropriately for use as activity-enhancing ingredient (c). Combinations of two or more spreaders include vegetable oil containing surface active agents, such as Soy Dex (Helena Chemical Company), etc.; and paraffin oil containing surface active agents, such as Oleo DP 11E (E.I. du Pont), Fyzol 11E (Schering Agrochemicals), Agri Dex (Helena Chemical Co.,) Atplas 411 (ICI Agrochemicals), Herbimax (Love Land Industries, Inc.), Competitor Crop Oil Concentrate (Red Pancer Chemical), Actipron (Oil Co.), DASH (BASF AG), Atlas Adherb (Atlas Interlates, Ltd.), Cropspray (Tribart Farm Chemical), Agravia 11E (Wakker Chemie), Penetrator (Helena Chemical Co.), Atlus Adjuvant Oil (Atlus Interlates, Ltd.), etc. Mixed spreaders shown in Table 7 are also included

Page 30, see attached revised Table 8

Page 33, lines 9-25 to page 37, lines 1-12 and insert the following:

The compositions for controlling harmful bio-organisms according to the present invention which comprises at least one imidazole compound of formula (I) as active ingredient (a) and at least one inorganic phosphorus compound as active ingredient (b) are particularly suitable for agricultural and horticultural uses. Specifically, they exhibit excellent effects of controlling diseases of crop plants, such as rice blast caused by *Pyricularia ozyzae,* rice sheath

blight caused by *Rhizoctonia solani,* cucumber anthracnose caused by *Colletotrichum lagenarium,* cucumber powdery mildew caused by *Sphaerotheca fuliglnea,* cucumber downy mildew caused by *Pseudoperonospora cubensis,* tomato late blight caused by *Phytophthora infestans,* tomato early blight caused by Alternaria *solani,* citrus melanose caused by *Diaporthe* citri, citrus common green mold caused by *Penicillium digitatum,* pear scab caused by *Venturia nashicola,* apple Alternaria blotch caused by *Alternaria mali,* grape downy mildew caused by *Plasmopara viticola,* gray mold caused by *Botrytis cinerea,* Sclerotinia rot caused by *Sclerotinia sclerotiorum,* and disease caused by rust, etc.; and soil diseases caused by phytopathogenic fungi, such as *Fusariun, Pythium, Rhizoctonia, Verticillium,* and *Plasinodiophora,* etc. In particular, the compositions of the present invention exhibit excellent effects of controlling diseases such as potato late blight caused by *Phytophthora infestans,* sweet pepper Phytophtora blight caused by *Phytophthora capsici,* watermelon Phytophthora rot caused by *Phytophthora drechsleri,* tobacco black shank caused by *Phytophthora nicotianae* var. *nicotianae,* tomato late blight caused by *Phytophthora infestans,* cucumber or melon downy mildew caused by *Pseudoperonospora cubensis,* cabbages or Chinese cabbages downy mildew caused by *Peronospora brassicae,* onion downy mildew caused by *Peronospora destructor,* onion shiroiro-eki-byo caused by *Phytophthora porri* and watermelon brown rot caused by *Phytophthora capsici,* and grape downy mildew caused by *Plasmopara viticola* and various soil diseases caused by e.g., *Aphanomyces, Pythiun.* The compositions have a prolonged residual effect and exhibit a particularly excellent curative effect. It is therefore possible to control diseases by treatment after infection. In addition, since the compositions possess a systemic activity, it is possible to control diseases of stems and foliage by soil treatment.

The compositions for controlling harmful bio-organisms according to the present invention which comprises at least one imidazole compound of formula (I) as active ingredient

(a) and a fungicide for Phycomycetes as active ingredient (b) have excellent fungicidal activities when applied to crop plants, for example, fruit vegetables (e.g. , cucumbers, tomatoes, eggplants, etc.); cereals (e.g., rice, wheat, etc.); seed vegetables; fruits (e.g. , apples, pears, grapes, citrus, etc.); potatoes, etc., which have been infected, or suspected of being infected, with pathogenic fungi. They exhibit excellent controlling effects on diseases such as powdery mildew, downy mildew, anthracnose, gray mold, common green mold, Sclerotinia rot, scab, Alternaria blotch, bacterial spot, black spot, melanose, ripe rot, late blight, early blight, blast, sheath blight, damping-off, southern blight, etc. The compositions also exert excellent controlling effects on soil diseases caused by Phycomycetes, such as *Pythiurn,* and other plant pathogens, such as *Fusarium, Rhizoctonia, Verticillium, Plasmodiophora* etc. The compositions have a prolonged residual effect and exhibit a particularly excellent curative effect. It is therefore possible to control diseases by treatment after infection. In addition, since the compositions possess a systemic activity, it is possible to control diseases of stems and foliage by soil treatment.

In particular, the compositions comprising at least one imidazole compound of formula (I) as active ingredient (a) and a copper compound and/or an organophosphorus compound as a fungicide for Phycomycetes as active ingredient (b) are particularly useful in agriculture and horticulture. Specifically, the compositions exhibit excellent effects of controlling diseases of crop plants, such as rice blast caused by *Pyricularia oryzae,* rice sheath blight caused by *Rhizoctonia solani,* cucumber anthracnose caused by *Colletotrichum lagenarium,* cucumber powdery mildew caused by *Sphaerotheca fuliginea,* cucumber downy mildew caused by *Pseudoperonospora cubensis,* tomato late blight caused by *Phytophthora infestans,* tomato early blight caused by *Alternaria solani,* citrus melanose caused by *Diaporthe citri,* citrus common green mold caused by *Penicillium digitatum,* pear scab caused by *Ventu*ria

nashicola, apple Alternaria blotch caused by *Alternaria mali,* grape downy mildew caused by *Plasmopara viticola,* gray mold caused by *Botrytis cinerea,* sclerotinia rot caused by *Sclerotinia sclerotiorurn,* rust, bacterial spot, etc.; and soil diseases caused by phytopathogenic fungi, such as Fusarium, *Pythium, Rhizoctonia, Verticillium, Plasmodiophora,* etc. In particular, the compositions of the present invention exhibit excellent effects of controlling diseases such as potato or tomato late blight caused by *Phytophthora infestans,* cucumber downy mildew caused by *Pseudoperonospora cubensis,* grape downy mildew caused by *Plasmopara viticola;* and various soil diseases caused by Phycomycetes, such as *Plasmodiophora, Aphanomyces, Pythium,* etc.

Page 38, lines 16-25 to page 39, lines 1-17 delete and insert the following:

The compositions for controlling harmful bio-organisms comprising at least one imidazole compound of formula (I) as active ingredient (a) and a β-methoxyacrylate compound, an oxazolidinedione compound or an organic chlorine compound as a fungicide for Phycomycetes as active ingredient (b) exhibit excellent controlling effects against diseases caused by Phycomycetes, such as plant diseases, e.g., rice blast; rice sheath blight; cucumber anthracnose; downy mildew of cucumbers, melons, cabbages, Chinese cabbages, onions, pumpkins, and grapes; powdery mildew of wheat, barley and cucumbers; late blight of potatoes, red peppers;, sweet peppers, watermelons, pumpkins, tobaccos, and tomatoes; wheat speckled leaf blotch; tomato early blight; citrus melanose; citrus common green mold; pear scab; apple Alternaria blotch; onion shiroiro-eki-byo; watermelon brown rot; various diseases such as gray mold, Sclerotinia rot, rust, and bacterial spot; various soil diseases caused by plant pathogenic fungi, etc., such as .*Fusarium, Pythium, Rhizoctonia, Verticillium,* etc. It also has excellent controlling effects on diseases caused by *Plasmodiophora.* The compositions show particularly

excellent controlling effects on diseases such as Phytophthora rot of potatoes, red peppers , sweet peppers, watermelons, pumpkins, tobaccos, tomatoes etc.; and downy mildew of cucumbers, melons, cabbages, Chinese cabbages, onions, pumpkins, grapes, etc.

Page 40 lines 6-25 to page 41, lines 1-12, delete and insert the following:

The compositions for controlling harmful bio-organisms comprising active ingredient (a) and activity enhancing ingredient (c) of the present invention are particularly suitable for agricultural and horticultural uses. The harmful bio-organisms which can be controlled by the compositions include plant pathogenic fungi causing plant diseases, such as rice blast; rice sheath blight; cucumber anthracnose; cucumber powdery mildew; downy mildew of cucumber, melon, cabbage, Chinese cabbage, onion and grape; late blight of potato, red pepper, sweet pepper, watermelon, pumpkin, tobacco; tomato Phytophthora rot; tomato early blight; citrus melanose; citrus common green mold; pear scab; apple Alternaria blotch; various plant diseases such as gray mold, Sclerotinia rot, rust, etc.; soil borne pathogenic fungi causing various plant diseases, such as *Fusarium, Pythium, Rhizoctonia, Verticillium, Plasmodiophora* etc.; insects, such as planthoppers, diamondback moth. green rice leafhopper, adzuki bean weevil, common cutworm, green peach aphid, etc.; mites, such as two- spotted spider mite, carmine spider mite, citrus red mite, etc.; and nematodes, such as southern root-knot nematode, etc. More specifically, they are effective on Phytophthora rot of potatoes, red peppers, sweet peppers, watermelons, pumpkins, tobaccos, and tomatoes and downy mildew of cucumbers, melons, cabbages, Chinese cabbages, onions, pumpkins, and grapes. The compositions comprising active ingredient (a) and activity-enhancing. ingredient (c) have a prolonged residual effect and exhibit not only an excellent preventive effect but an excellent curative effect. It is therefore possible to control diseases by treatment after infection.

Page 58, lines 16-22 delete and insert the following:

A theoretical incidence rate (%) can be calculated from the following Colby's formula. In cases where an incidence rate of a tested composition is lower than the theoretical one, the tested composition can produce a synergistic effect. In these cases, the theoretical incidence rate (%) is shown in parentheses in Table 9.

Page 60 lines 24-25 to page 61, lines 1-5 delete and insert the following:

A theoretical incidence rate (%) can be calculated from the following Colby's formula. In cases where an incidence rate of a tested composition is lower than the theoretical one, the tested composition can produce a synergistic effect. In these cases, the theoretical incidence rate (%) is shown in parentheses in Table 10.

Page 64, lines 19-25 delete and insert the following:

A theoretical incidence rate (%) can be calculated from the following Colby's formula. In cases where an incidence rate of a tested composition is lower than the theoretical one, the tested composition can

produce a synergistic effect. In these cases, the theoretical incidence rate (%) is shown in parentheses in Tables 12 to 19.

Page 70, line 1-7 delete and insert the following:

A theoretical incidence rate (%) can be calculated from the following Colby's formula. In cases where an incidence rate of a tested composition is lower than the theoretical one, the tested composition can produce a synergistic effect. In these cases, the theoretical incidence rate (%) is shown in parenthesis in Table 20.

Page 71, lines 13-19 delete and insert the following:

A theoretical incidence rate (%) can be calculated from the following Colby's formula. In cases where an incidence rate of a tested composition is lower than the theoretical one, the tested composition can produce a synergistic effect. In these cases, the theoretical incidence rate (%) is shown in parentheses in Tables 21 to 23.

Page 74, line 4 up to page 75, last line, delete and insert the following:

A cucumber (cultivar: Suyo) was cultivated in polyethylene pots (diameter: 7.5 cm). When the plant reached a two-leaf stage, 10 ml of a composition containing Compound No. 1 and Doitsu Borudo A (trade name of copper oxychloride wettable powder produced by Hokko Chemical Industry Co., Ltd.) in respective concentrations shown inTable 25 below was sprayed on the seedling by means of a spray gun. After 24 hours, it was inoculated by spraying a spore suspension of fungi of downy mildew *(Pseudopernospora cubensis)*. The plant was kept in a chamber set at 22 to 24°C for 6 days, and the lesion area of the first leaf was measured, from which the disease incidence rate (%) was calculated according to the following formula. The

results obtained are shown in Table 25.

$$\text{Incidence rate (\%)} = (a/b) \times 100$$

wherein a is a lesion area of a treated plant; and b is a lesion area of a control (non-treated plant).

A theoretical incidence rate (%) can be calculated from the following Colby's formula. In cases where an incidence rate of a tested composition is lower than the theoretical one, the tested composition can produce a synergistic effect. In these cases, the theoretical incidence rate (%) is shown in parentheses in Table 25.

Theoretical incidence rate (%) = $(X^6 \times Y^6)/100$ wherein X^6 is an incidence rate (%) of a plant treated with only Compound No. 1; and Y^6 is an incidence rate (%) of a plant treated with only Doitsu Borudo A.

Page 76, see revised Table 25 as attached.

Page 76, the paragraph after Table 25 to page 77 lines 1-3 delete and insert the following:

A tomato (cultivar: Ponderosa) was cultivated in polyethylene pots (diameter: 7.5 cm). When the plant reached a four-leaf stage, 10 ml of a composition containing Compound No. 1 and Kocide Bordeaux (trade name of a cupric hydroxide wettable powder produced by Griffin) or Doitsu Borudo A (trade name of copper oxychloride wettable powder produced by Hokko Chemical Industry Co., Ltd.) in the respective concentrations shown in Tables 26 and 27 below was sprayed on the seedling by means of a spray gun. After 24 hours, it was inoculated by spraying a zoosporangium suspension of fungi of late blight (*Phytophthora infestans*). The plant

was kept in a chamber set at 22 to 24°C for 3 days, and the lesion area was measured, from which the disease incidence rate (%) was calculated in the same manner as in Test Example 1. The results obtained are shown in Tables 26 and 27.

Page 77 lines 11-15 delete and insert the following:

Theoretical incidence rate (%) = $(X^7 \times Y^7)/100$ wherein X^7 is an incidence rate (%) of a plant treated with only Compound No. 1; and Y^7 is an incidence rate (%) of a plant treated with only Kocide Bordeaux or Doitsu Borudo A.

Page 78 see attached Table 27

Page 79, lines 1-7 delete and insert the following:

A theoretical incidence rate (%) can be calculated from the following Colby's formula. In cases where an incidence rate of a tested composition is lower than the theoretical one, the tested composition can produce a synergistic effect. In these cases, the theoretical incidence rate (%) is shown in parentheses in Table 28.

Page 96, lines 6 7 delete and insert the following:

(2) Dispersant SOPROPHOR FLK (trade name, produced by RHÔNE-POULENC) 1.0 part

Page 97, lines 1-4 delete and insert the following:

The above components and an inorganic phosphorous compound were mixed at a weight ratio of 4:1 to prepare a 20% wettable powder of the inorganic phosphorous compound.

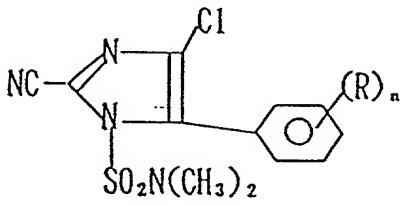
IN THE CLAIMS:

Claims 2, 11-14 and 16-20 are canceled.

The claims are amended as follows:

1. (Amended) A composition for controlling harmful bio-organisms comprising

(a) at least one imidazole compound represented by formula (I):



(I)

wherein R represents a lower alkyl group or a lower alkoxy group; and

n represents an integer of 1 to 5, as an active ingredient, and

(b) at least one inorganic phosphorus compound and/or at least one fungicide for Phycomycetes as an active ingredient.

3. (Amended) The composition according to claim1, wherein the active ingredient (b) is at least one inorganic phosphorus compound.

6. (Amended) The composition according to claim1, wherein the active ingredient (b) is at least one fungicide for Phycomycetes.

8. (Amended) The composition according to claim 6, wherein the fungicide is a compound selected group the group consisting of:

methyl (E) -2-{2- [6- (2-cyanophenoxy)pyrimidin-4-yloxy]phenyl}-3-methoxyacrylate,

methyl (E)-methoxyimino [α-(o-tolyloxy) -*O*--tolyl] acetate,

3-anilino-5-methyl-5- (4-phenoxyphenyl) -1,3-oxazolidine-2,4-dione,

1-(2-cyano-2-methoxyiminoacetyl) -3-ethylurea, tetrachloroisophthalonitrile,

pentachloronitrobenzene,
methyl *N*- (2-methoxyacetyl) -*N*- (2, 6-xylyl) -DLalaninate,

2-methoxy-N- (2-oxo-1,3-oxazolidin-3-yl) aceto-2',6'-xylidide,
(±)-α-2-chloro-N-- (2, 6-xylylacetamide) -γ-butyrolactone,

methyl N-phenylacetyl-N-(2,6-xylyl) -DL-alaninate,

methyl *N*- (2-furoyl) -*N*- (2,6-xylyl) -DL-alaninate,

(±) -α- [N- (3-chlorophenyl) cyclopropane-carboxamide] -γ-butyrolactone

(E, Z) -4- [3- (4-chlorophenyl) -3- (3,4-dimethoxyphenyl) acryloyl] morpholine,

an inorganic copper fungicide,

an organic copper fungicide,

aluminum tris (ethyl phosphonate),

O-2, 6-dichloro-p-tolyl-*O*, O-dimethyl phosphorothioate,

(R, S) -S- (R, S) -sec-butyl -*O*-ethyl -2-oxo-2-thiazolidinyl phosphonothioate,

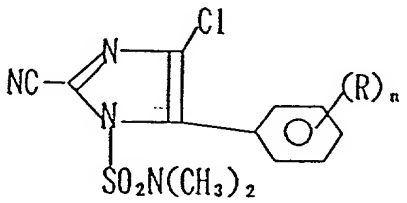
S-benzyl *O,O*-diisopropyl phosphorothioate,

O-ethyl S,S-diphenyl phosphorodithioate, and

ethyl 2-diethoxythiophosphoryloxy-5-methylpyrazolo (1,5-a) pyrimidine-6-carboxylate.

15. (Amended) A method for controlling harmful bio-organisms comprising applying a composition for controlling harmful bio-organisms onto harmful bio-organisms, wherein the composition comprises:

(a) at least one imidazole compound represented by formula (I):



(I)

wherein R represents a lower alkyl group or a lower alkoxy group; and

n represents an integer of 1 to 5, as an active ingredient, and

(b) at least one inorganic phosphorus compound and/or at least one fungicide for Phycomycetes as an active ingredient

Claims 21 and 22 are added as new claims.

--21. The method for controlling harmful bio-organisms of claim 15 wherein active ingredient (b) is at least one inorganic phosphorus compound.

22. The method for controlling harmful bio-organisms of claim 15 wherein active ingredient (b) is at least one fungicide for Phycomycetes.--

REMARKS

Entry prior to examination is re respectfully requested.

The specification has been amended as in the parent application, with correction of a couple of other clerical errors.

The claims have been amended to delete the subject matter elected in the parent application.

Respectfully submitted,

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Date: December 27, 2001

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The specification is changed as follows:

Page 1, immediately beneath the Title insert:

--This application is a divisional application of USSN 09/403,368 filed October 21, 1999 as the national stage application under 37 C.F.R. § 371 of PCT/JP98/01889 filed April 23, 1998.--

Page 9, lines 12-13, change as follows:

pentachloronitrobenzene (common name: ~~Quintozen~~Quintozene));

Page 10, lines 17-18 change as follows:

S-benzyl ~~diisopropyl~~O,O-di-isopropyl phosphorothioate (common name: Iprobenfos),

lines 19-20, change as follows:

O-ethyl ~~diphenyl~~S,S-diphenyl phosphorodithioate (common name: Edifenphos),

Page 11, lines 21-25 to page 12, lines 1-15 , delete and insert:

The inorganic copper fungicides include those containing copper oxysulfate as an active ingredient such as Sanpun Bordeaux (trade name, produced by Daiichi Noyaku K.K. and Hokko Chemical Industry Co., Ltd.) and Sanpun Bordeaux Dust DL (trade name, produced by Daiichi Noyaku K.K. and Hokko Chemical Industry Co., Ltd.); those containing copper (I) oxychloride

as an active ingredient, such as San Bordeaux (trade name, produced by Sankei Chemical Co., Ltd.), ~~Deutch Bordeaux~~Doitsu Borudo A (trade name, produced by Dai-ichi Noyaku K.KI. and Hokko Chemical Industry Co., Ltd.), Do-cal Wettable Powder (trade name, produced by Yashima Chemical Industry Co., Ltd.), Do-jet (trade name, produced by Nissan Chemical Industries, Ltd.), etc.; those containing cupric hydroxide as an active ingredienL, such as Kocide Bordeaux, Kocide DF, Kocide SD (trade names, all produced by Griffin), etc.; and those containing anhydrous copper (II) sulfate, such as Gandie Wettable Powder (trade name, produced by Agro-Kanesho Co., Ltd.), etc.

Page 12, lines 16-25 to page 13, lines 1-24 delete and insert the following:

The fungicidal preparations containing the inorganic copper fungicide and chemicals (such as fungicides, etc.) other than ingredients (a) and (b) include a Bordeaux mixture containing basic copper calcium sulfate; copper-sulfur fungicides, such as Engei Bordeaux (trade name, produced by Sankei Chemical Co., Ltd.), etc.; copper-validamycin fungicides; copper-validamycin-fthalide fungicides; copper-pyrifencox fungicides; copper (I)-vinclozolin fungicides; copper-fthalide fungicides; copper-procymidone fungicides, such as Scletane Wettable Powder (trade name, produced by Hokko Chemical Industry Co., Ltd.); copper (I) - fosetyl wettable powders; copper-metalaxyl fungicides, such as Ridomil Copper Wettable Powder (trade name, produced by Nihon Nohyaku Co., Ltd.); iprodione copper (I) fungicides, such as Daisedo Wettable Powder (trade name, produced by Yashima Chemical Industry Co., Ltd.); ~~iminoctadiene~~iminoctadine triacetate-copper fungicides; oxadixyl copper (I) fungicides; oxolinic acid-copper fungicides; kasugamycin-copper fungicides, such as Kasumin Bordeaux Dust 3DL (trade name, produced by Hokko Chemical Industry Co., Ltd.), Kasumin Bordeaux

(trade name, produced by Dai-ichi Noyaku K.K. and Hokko Chemical Industry Co., Ltd.), etc.; ~~dithianone~~ dithianon copper (I) fungicides; streptomycin-copper fungicides, such as Do Stomy Wettable Powder (trade name, produced by Nihon Nohyaku Co., Ltd.), etc.; sodium hydrogencarbonate-copper fungicides, such as G-Fine Wettable Powder (trade name, produced by Yashima Chemical Industry Co., Ltd.); and copper-organocopper fungicides , such as Oxy Bordeaux (trade name, produced by Sankyo Co., Ltd.), Kinset Wettable Powder (trade name, produced by Agro-Kanesho Co., Ltd.), Kinset Wettable Powder 80 (trade name:, produced by Agro-Kanesho Co., Ltd.), etc.

Page 14, lines 7-25 through page 15, lines 1-4 delete and insert the following:

The organic copper fungicides include 8-hydroxyquinoline copper fungicides, such as Quinone-do Wettable Powder 40 or 80 (trade name, produced by Agro-Kanesho Co., Ltd.), Quinone-do Granules (trade name, produced by Agro-Kanesho Co., Ltd.), Quinone-do Flowable (trade name, produced by Agro-Kanesho Co. , Ltd.), Oxine- copper (I) Wettable Powder (trade name, produced by Tomono Agrica Co., Ltd.), Oxine-copper (I) Wettable Powder 75 (trade name, produced by Tomono Agrica Co., Ltd.), Oxine-copper (I) Wettable Powder 80 (trade name, produced by Tomono Agrica Co., Ltd. and Nissan Chemical Industries, Ltd.), Oxine-copper (I) Flowable (trade name, produced by Tomono Agrica Co., Ltd. and Nissan Chemical Industries, Ltd.), ~~Doquline~~Dokirin Wettable Powder 80 (trade name, produced by Nihon Nohyaku Co., Ltd.), and Dokirin Flowable (trade name, produced by Nihon Nohyaku Co., Ltd.), etc.; copper hydroxynonylbenzenesulfonate fungicides such as Yonepon (trade name, produced by Yonezawa Kagaku K.K.), etc.; copper (II) bis (ethylenediamine) bis (dodecylbenzenesulfonate) fungicides, such as Sanyol (trade name, produced by Otsuka Chemical Co., Ltd. and Yonezawa Kagaku K.K.), etc.; and copper terephthalate fungicides.

Page 16, lines 17-25 through page 18, lines 1-4 delete and insert the following:

Suitable nonionic surface active agents which can be used as activity-enhancing ingredient (c) include polyoxyethylene alkyl ethers, polyoxyethylene alkylphenyl ethers, polyoxyethylene aryl ethers, polyoxyethylene glycol alkyl ethers, polyoxyethylene fatty acid esters, polyoxyethylene polyol fatty acid esters, polyoxyethylene fatty acid amides, amine N-oxides such as Aromox C/12W (trade name, produced by Akzo Chemie), polyoxyethylene alkylamines, glycerol fatty acid esters, silicone surface active agents, polyoxyethylene alkyl thioether polyphosphate surface active agents such as Reider (trade name, produced by American Trading Company), higher alcohol sulfuric acid esters, and dialkylsulfosuccinates. Among these, preferred are polyoxyethylene alkyl ethers, polyoxyethylene alkylpheny ethers, polyoxyethylene fatty acid esters, polyoxyethylene fatty acid amides, silicone surface active agents, higher alcohol sulfuric acid esters, and dialkylsulfosuccinates. Still preferred are silicone surface active agents, polyoxyethylene alkylphenyl ethers and polyoxyethylene fatty acid esters. Silicone surface active agents, especially ~~Dyne-Amic~~DyneAmic (trade mark, produced by Setre Chemical) and KINETIC (trade mark, produced by Setre Chemical), and SILWETT L-77 (produced by Witco) , and SLIPPA (produced by Interagro) are particularly preferred.

Specific examples of preferred nonionic surface active agents are listed in Table 1 below. Additionally polyoxyethylene polysilane ether (a kind of silicone surface active agents), Renex 36 (trade name, polyoxyethylene alkyl ether produced by Bayer AG), Crop Oil Extra (trade name of a polyoxyethylene alkylphenyl ether produced by Kalo, Inc.), Ortho X-77 ~~Spreader~~ Spreader (trade name, produced by Chevron Chemical Company), and COOP Spreader Activator (trade

name, produced by Formland Industry) are also include in useable nonionic surface active agents.

Page 21, see the attached chart.

Page 23, line 2 delete in its entirty and insert the following:

~~Nonionic~~Anionic Surface Active Agents

Page 25, the paragraph after Table 4 delete and insert the following:

The paraffin oil which can be used as activity enhancing ingredient (c) includes product originated from animal and/or vegetable oil, product originated from mineral oil (e.g., petroleum), and mixtures thereof. Specific examples are shown in Table 5 below.

Page 27, the paragraph after Table 6 delete in its entirety to page 28, lines 1-12 and insert the following:

The above-described spreaders, i.e., surface active agents (except sorbitan higher fatty acid esters), animal and/or vegetable oil, paraffin oil, mineral oil, etc.~~)~~ can be combined appropriately for use as activity-enhancing ingredient (c). Combinations of two or more spreaders include vegetable oil containing surface active agents, such as Soy Dex (Helena Chemical Company), etc.; and paraffin oil containing surface active agents, such as Oleo DP 11E (E.I. du Pont), Fyzol 11E (Schering Agrochemicals), Agri Dex (Helena Chemical Co.,) Atplas

411 (ICI Agrochemicals), Herbimax (Love Land Industries, Inc.), Competitor Crop Oil Concentrate (Red Pancer Chemical), Actipron (Oil Co.), DASH (BASF AG), Atlas Adherb (Atlas Interlates, Ltd.), Cropspray (Tribart Farm Chemical), Agravia 11E (Wakker Chemie), Penetrator (Helena Chemical Co.), Atlus Adjuvant Oil (Atlus Interlates, Ltd.), etc. Mixed spreaders shown in Table 7 are also included

Page 30, see attached revised Table 8

Page 33, lines 9-25 to page 37, lines 1-12 and insert the following:

The compositions for controlling harmful bio-organisms according to the present invention which comprises at least one imidazole compound of formula (I) as active ingredient (a) and at least one inorganic phosphorus compound as active ingredient (b) are particularly suitable for agricultural and horticultural uses. Specifically, they exhibit excellent effects of controlling diseases of crop plants, such as rice blast caused by *Pyricularia ozyzae,* rice sheath blight caused by *Rhizoctonia solani,* cucumber anthracnose caused by *Colletotrichum lagenarium,* cucumber powdery mildew caused by *Sphaerotheca fuliglnea,* cucumber downy mildew caused by *Pseudoperonospora cubensis,* tomato late blight caused by *Phytophthora infestans,* tomato early blight caused by Alternaria *solani,* citrus melanose caused by *Diaporthe* citri, citrus common green mold caused by *Penicillium digitatum,* pear scab caused by *Venturia nashicola,* apple Alternaria blotch caused by *Alternaria mali,* grape downy mildew caused by *Plasmopara viticola,* gray mold caused by *Botrytis cinerea,* ~~Sclerotial~~ Sclerotinia rot caused by *Sclerotinia sclerotiorum,* and disease caused by rust, etc.; and soil diseases caused by phytopathogenic fungi, such as *Fusariun, Pythium, Rhizoctonia, Verticillium,* and

Plasinodiophora, etc. In particular, the compositions of the present invention exhibit excellent effects of controlling diseases such as potato late blight caused by *Phytophthora infestans,* sweet pepper Phytophtora blight caused by *Phytophthora capsici,* watermelon Phytophthora rot caused by *Phytophthora drechsleri,* tobacco black shank caused by *Phytophthora nicotianae* var. *nicotianae,* tomato late blight caused by *Phytophthora infestans,* cucumber or melon downy ~~milder~~ mildew caused by *Pseudoperonospora cubensis,* cabbages or Chinese cabbages downy mildew caused by *Peronospora brassicae,* onion downy mildew caused by *Peronospora destructor,* onion shiroiro-eki-byo caused by *Phytophthora porri* and watermelon brown rot caused by *Phytophthora capsici,* and ~~grapedowny~~ grape downy mildew caused by *Plasmopara viticola* and various soil diseases caused by e.g., *Aphanomyces, Pythiun.* The compositions have a prolonged residual effect and exhibit a particularly excellent curative effect. It is therefore possible to control diseases by treatment after infection. In addition, since the compositions possess a systemic activity, it is possible to control diseases of stems and foliage by soil treatment.

The compositions for controlling harmful bio-organisms according to the present invention which comprises at least one imidazole compound of formula (I) as active ingredient (a) and a fungicide for Phycomycetes as active ingredient (b) have excellent ~~bactericidal~~ fungicidal activities when applied to crop plants, for example, fruit vegetables (e.g. , cucumbers, tomatoes, eggplants, etc.); cereals (e.g., rice, wheat, etc.); seed vegetables; fruits (e.g. , apples, pears, grapes, citrus, etc.); potatoes, etc., which have been infected, or suspected of being infected, with pathogenic fungi. They exhibit excellent controlling effects on diseases such as powdery mildew, downy mildew, anthracnose, gray mold, common green mold, ~~Sclerotial~~ Sclerotinia rot, scab, Alternaria blotch, bacterial spot, black spot, melanose, ripe rot, late blight, early blight, blast, sheath blight, damping-off, southern blight, etc. The compositions also exert

excellent controlling effects on soil diseases caused by Phycomycetes, such as *Pythiurn,* and other plant pathogens, such as *Fusarium, Rhizoctonia*, *Verticillium, Plasmodiophora* etc. The compositions have a prolonged residual effect and exhibit a particularly excellent curative effect. It is therefore possible to control diseases by treatment after infection. In addition, since the compositions possess a systemic activity, it is possible to control diseases of stems and foliage by soil treatment.

In particular, the compositions comprising at least one imidazole compound of formula (I) as active ingredient (a) and a copper compound and/or an organophosphorus compound as a fungicide for Phycomycetes as active ingredient (b) are particularly useful in agriculture and horticulture. Specifically, the compositions exhibit excellent effects of controlling diseases of crop plants, such as rice blast caused by *Pyricularia oryzae,* rice sheath blight caused by *Rhizoctonia solani*, cucumber anthracnose caused by *Colletotrichum lagenarium,* cucumber powdery mildew caused by *Sphaerotheca fuliginea,* cucumber downy mildew caused by *Pseudoperonospora cubensis,* tomato late blight caused by *Phytophthora infestans,* tomato early blight caused by *Alternaria solani,* citrus melanose caused by *Diaporthe citri,* citrus common green mold caused by *Penicillium digitatum,* pear scab caused by *Ventu*ria *nashicola,* apple Alternaria blotch caused by *Alternaria mali,* grape downy mildew caused by *Plasmopara viticola,* gray mold caused by *Botrytis cinerea,* sclerotinia rot caused by *Sclerotinia sclerotiorurn,* rust, bacterial spot, etc.; and soil diseases caused by phytopathogenic fungi, such as Fusarium, *Pythium, Rhizoctonia, Verticillium*, *Plasmodiophora,* etc. In particular, the compositions of the present invention exhibit excellent effects of controlling diseases such as potato or tomato late blight caused by *Phytophthora infestans,* cucumber downy mildew caused by *Pseudoperonospora cubensis,* grape downy ~~milder~~mildew caused by *Plasmopara viticola;*

and various soil diseases caused by Phycomycetes, such as *Plasmodiophora, Aphanomyces, Pythium,* etc.

Page 38, lines 16-25 to page 39, lines 1-17 delete and insert the following:

The compositions for controlling harmful bio-organisms comprising at least one imidazole compound of formula (I) as active ingredient (a) and a β-methoxyacrylate compound, an oxazolidinedione compound or an organic chlorine compound as a fungicide for Phycomycetes as active ingredient (b) exhibit excellent controlling effects against diseases caused by Phycomycetes, such as plant diseases, e.g., rice blast; rice sheath blight; cucumber anthracnose; downy mildew of cucumbers, melons, cabbages, Chinese cabbages, onions, pumpkins, and grapes; powdery mildew of wheat, barley and cucumbers; late blight of potatoes, red peppers;, sweet peppers, watermelons, pumpkins, tobaccos, and tomatoes; wheat speckled leaf blotch; tomato early blight; citrus melanose; citrus common green mold; pear scab; apple Alternaria blotch; onion shiroiro-eki-byo; watermelon brown rot; various diseases such as gray mold, ~~sclerotial~~ Sclerotinia rot, rust, and bacterial spot; various soil diseases caused by plant pathogenic fungi, etc., such as .*Fusarium, Pythium, Rhizoctonia, Verticillium,* etc. It also has excellent controlling effects on diseases caused by *Plasmodiophora.* The compositions show particularly excellent controlling effects on diseases such as Phytophthora rot of potatoes, red peppers , sweet peppers, watermelons, pumpkins, tobaccos, tomatoes etc.; and downy mildew of cucumbers, melons, cabbages, Chinese cabbages, onions, pumpkins, grapes, etc.

Page 40 lines 6-25 to page 41, lines 1-12, delete and insert the following:

The compositions for controlling harmful bio-organisms comprising active ingredient (a) and activity enhancing ingredient (c) of the present invention are particularly suitable for

agricultural and horticultural uses. The harmful bio-organisms which can be controlled by the compositions include plant pathogenic fungi causing plant diseases, such as rice blast; rice sheath blight; cucumber anthracnose; cucumber powdery mildew; downy ~~milder~~mildew of cucumber, melon, cabbage, Chinese cabbage, onion and grape; late blight of potato, red pepper, sweet pepper, watermelon, pumpkin, tobacco; tomato Phytophthora rot; tomato early blight; citrus melanose; citrus common green mold; pear scab; apple Alternaria blotch; various plant diseases such as gray mold, ~~sclerotial~~ Sclerotinia rot, rust, etc.; soil borne pathogenic fungi causing various plant diseases, such as *Fusarium, Pythium, Rhizoctonia, Verticillium, Plasmodiophora* etc.; insects, such as planthoppers, diamondback moth. green rice leafhopper, adzuki bean weevil, common cutworm, green peach aphid, etc.; mites, such as two- spotted spider mite, carmine spider mite, citrus red mite, etc.; and nematodes, such as southern root-knot nematode, etc. More specifically, they are effective on Phytophthora rot of potatoes, red peppers, sweet peppers, watermelons, pumpkins, tobaccos, and tomatoes and downy mildew of cucumbers, melons, cabbages, Chinese cabbages, onions, pumpkins, and grapes. The compositions comprising active ingredient (a) and activity-enhancing. ingredient (c) have a prolonged residual effect and exhibit not only an excellent preventive effect but an excellent curative effect. It is therefore possible to control diseases by treatment after infection.

Page 58, lines 16-22 delete and insert the following:

A theoretical incidence rate (%) can be calculated from the following Colby's formula. In cases where an incidence rate of a tested composition is lower than the theoretical one, the tested composition can ~~be the to~~ produce a synergistic effect. In these cases, the theoretical incidence rate (%) is shown in parentheses in Table 9.

Page 60 lines 24-25 to page 61, lines 1-5 delete and insert the following:

A theoretical incidence rate (%) can be calculated from the following Colby's formula. In cases where an incidence rate of a tested composition is lower than the theoretical one, the tested composition can ~~be the to~~ produce a synergistic effect. In these cases, the theoretical incidence rate (%) is shown in parentheses in Table 10.

Page 64, lines 19-25 delete and insert the following:

A theoretical incidence rate (%) can be calculated from the following Colby's formula. In cases where an incidence rate of a tested composition is lower than the theoretical one, the tested composition can ~~be the to~~
produce a synergistic effect. In these cases, the theoretical incidence rate (%) is shown in parentheses in Tables 12 to 19.

Page 70, line 1-7 delete and insert the following:

A theoretical incidence rate (%) can be calculated from the following Colby's formula. In cases where an incidence rate of a tested composition is lower than the theoretical one, the tested composition can ~~be the to~~ produce a synergistic effect. In these cases, the theoretical incidence rate (%) is shown in parenthesis in Table 20.

Page 71, lines 13-19 delete and insert the following:

A theoretical incidence rate (%) can be calculated from the following Colby's formula. In cases where an incidence rate of a tested composition is lower than the theoretical one, the tested composition can ~~be the to~~ produce a synergistic effect. In these cases, the theoretical incidence rate (%) is shown in parentheses in Tables 21 to 23.

Page 74, line 4 up to page 75, last line, delete and insert the following:

A cucumber (cultivar: Suyo) was cultivated in polyethylene pots (diameter: 7.5 cm). When the plant reached a two-leaf stage, 10 ml of a composition containing Compound No. 1 and ~~Deutch Bordeaux~~ Doitsu Borudo A (trade name of copper oxychloride wettable powder produced by Hokko Chemical Industry Co., Ltd.) in respective concentrations shown inTable 25 below was sprayed on the seedling by means of a spray gun. After 24 hours, it was inoculated by spraying a spore suspension of fungi of ~~dawny~~ downy mildew *(Pseudopernospora cubensis)*. The plant was kept in a chamber set at 22 to 24°C for 6 days, and the lesion area of the first leaf was measured, from which the disease incidence rate (%) was calculated according to the

following formula. The results obtained are shown in Table 25.

$$\text{Incidence rate (\%)} = (a/b) \times 100$$

wherein a is a lesion area of a treated plant; and b is a lesion area of a control (non-treated plant).

A theoretical incidence rate (%) can be calculated from the following Colby's formula. In cases where an incidence rate of a tested composition is lower than the theoretical one, the tested composition can ~~be the to~~ produce a synergistic effect. In these cases, the theoretical incidence rate (%) is shown in parentheses in Table 25.

Theoretical incidence rate (%) = $(X^6 \times Y^6)/100$ wherein X^6 is an incidence rate (%) of a plant treated with only Compound No. 1; and Y^6 is an incidence rate (%) of a plant treated with only ~~Duitch Bordeaux~~ Doitsu Borudo A.

Page 76, see revised Table 25 as attached.

Page 76, the paragraph after Table 25 to page 77 lines 1-3 delete and insert the following:

A tomato (cultivar: Ponderosa) was cultivated in polyethylene pots (diameter: 7.5 cm). When the plant reached a four-leaf stage, 10 ml of a composition containing Compound No. 1 and Kocide Bordeaux (trade name of a cupric hydroxide wettable powder produced by Griffin) or ~~Duitch Bordeaux~~ Doitsu Borudo A (trade name of copper oxychloride wettable powder produced by Hokko Chemical Industry Co., Ltd.) in the respective concentrations shown in Tables 26 and 27 below was sprayed on the seedling by means of a spray gun. After 24 hours, it was inoculated by spraying a zoosporangium suspension of fungi of late blight (*Phytophthora*

infestans). The plant was kept in a chamber set at 22 to 24°C for 3 days, and the lesion area was measured, from which the disease incidence rate (%) was calculated in the same manner as in Test Example 1. The results obtained are shown in Tables 26 and 27.

Page 77 lines 11-15 delete and insert the following:

Theoretical incidence rate (%) = $(X^7 \times Y^7)/100$ wherein X^7 is an incidence rate (%) of a plant treated with only Compound No. 1; and Y^7 is an incidence rate (%) of a plant treated with only Kocide Bordeaux or ~~Deutch Bordeaux~~ Doitsu Borudo A.

Page 78 see attached Table 27

Page 79, lines 1-7 delete and insert the following:

A theoretical incidence rate (%) can be calculated from the following Colby's formula. In cases where an incidence rate of a tested composition is lower than the theoretical one, the tested composition can ~~be the to~~ produce a synergistic effect. In these cases, the theoretical incidence rate (%) is shown in parentheses in Table 28.

Page 96, lines 6 7 delete and insert the following:

(2) Dispersant SOPROPHOR FLK (trade name, produced by ~~PhôNE~~RHôNE-POULENC) 1.0 part

Page 97, lines 1-4 delete and insert the following:

~~A mixture of the~~ The above components and an inorganic phosphorous compound were mixed at a weight ratio of 4:1 to prepare a 20% wettable powder of the inorganic phosphorous compound.

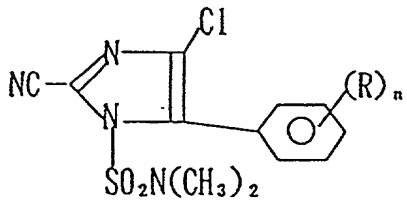
IN THE CLAIMS:

Claims 2, 11-14 and 16-20 are canceled.

The claims are amended as follows:

1. (Amended) A composition for controlling harmful bio-organisms comprising

(a) at least one imidazole compound represented by formula (I):



(I)

wherein R represents a lower alkyl group or a lower alkoxy group; and

n represents an integer of 1 to 5, as an active ingredient, and

(b) at least one inorganic phosphorus compound and/or at least one fungicide for Phycomycetes as an active ingredient ~~or~~

~~(c) a spreader as an activity-enhancing ingredient~~.

3. (Amended) The composition according to claim ~~2~~1, wherein the active ingredient (b) is at least one inorganic phosphorus compound.

6. (Amended) The composition according to claim ~~2~~1, wherein the active ingredient (b) is at least one fungicide for Phycomycetes.

8. (Amended) The composition according to claim 6, wherein the fungicide is a compound selected group the group consisting of:

methyl (E) -2-{2- [6- (2-cyanophenoxy)pyrimidin-4-yloxy]phenyl}-3-methoxyacrylate,

methyl (E)-methoxyimino [α-(o-tolyloxy) -*O*--tolyl] acetate,

3-anilino-5-methyl-5- (4-phenoxyphenyl) -1,3-oxazolidine-2,4-dione,

1-(2-cyano-2-methoxyiminoacetyl) -3-ethylurea, tetrachloroisophthalonitrile,

pentachloronitrobenzene,
methyl *N*- (2-methoxyacetyl) -*N*- (2, 6-xylyl) -DL-alaninate,

2-methoxy-N- (2-oxo-1,3-oxazolidin-3-yl) aceto-2',6'-xylidide,
(±)-α-2-chloro-N- (2, 6-xylylacetamide) -γ-butyrolactone,

methyl N-phenylacetyl-N-(2,6-xylyl) -DL-alaninate,

methyl *N*- (2-furoyl) -*N*- (2,6-xylyl) -DL-alaninate,

(±) -α- [N- (3-chlorophenyl) cyclopropane-carboxamide] -γ-butyrolactone

(E, Z) -4- [3- (4-chlorophenyl) -3- (3,4-dimethoxyphenyl) acryloyl] morpholine,

an inorganic copper fungicide,

an organic copper fungicide,

aluminum tris (ethyl phosphonate),

O-2, 6-dichloro-p-tolyl-*O*, O-dimethyl phosphorothioate,

(R, S) -S- (R, S) -sec-butyl -*O*-ethyl -2-oxo-2-thiazolidinyl phosphonothioate,

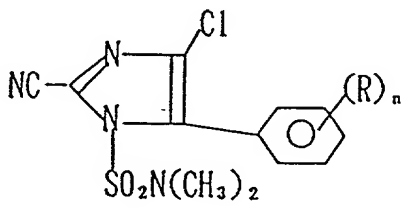
S-benzyl *O,O*-diisopropyl phosphorothioate,

O-ethyl S,S-diphenyl phosphorodithioate, and

ethyl 2-diethoxythiophosphoryloxy-5-methylpyrazolo (1,5-a) pyrimidine-6-carboxylate.

15. (Amended) A method for controlling harmful bio-organisms comprising applying a composition for controlling harmful bio-organisms onto harmful bio-organisms, wherein the composition comprises:

(a) at least one imidazole compound represented by formula (I):



(I)

wherein R represents a lower alkyl group or a lower alkoxy group; and

n represents an integer of 1 to 5, as an active ingredient, and

(b) at least one inorganic phosphorus compound and/or at least one fungicide for Phycomycetes as an active ingredient ~~or~~

~~(c) a spreader as an activity-enhancing ingredient~~.

Claims 21 and 22 are added as new claims.

--21. The method for controlling harmful bio-organisms of claim 15 wherein active ingredient (b) is at least one inorganic phosphorus compound.

22. The method for controlling harmful bio-organisms of claim 15 wherein active ingredient (b) is at least one fungicide for Phycomycetes.--